

TFT-LCD with VGA & DVI-D

12" – 15" – 17" – 19"

VA series

MANUAL



Europe	North America
Canvys – Visual Technology Solutions A Division of Richardson Electronics GmbH Raiffeisenstraße 5 D-78166 Donaueschingen Tel.: +49 (0) 771 83 00 – 0 Fax.: +49 (0) 771 83 00 – 80 Info-europe@canvys.com	Canvys – Visual Technology Solutions A Division of Richardson Electronics (NASDAQ:RELL) 40W267 Keslinger Road; P.O. Box 393 LaFox, Illinois 60147-0393; USA Tel.: +1-800222-2787 Fax.: +1-630-208-2550 Info@canvys.com

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A. Federal Communications Commission (FCC) Statement

This Equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning:

A shielded-type power cord is required in order meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used.

Use only shielded cables to connect I/O devices to this equipment.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

B. IMPORTANT SAFEGUARDS

Warning:

1. Read all of these instructions.
2. Save these instructions for later use.
3. Unplug this monitor from the wall outlet before cleaning. DO NOT use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. DO NOT use attachments not recommended by the monitor manufacturer as they may cause hazards.
5. DO NOT use this monitor near water. For example near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement or near a swimming pool, etc...
6. DO NOT place this monitor on an unstable cart, stand, or table. The monitor may fall, causing serious injury to a child or adult and serious damage to the appliance. Use it with a cart or stand only recommended by the manufacturer or sold with monitor. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.
7. Slots and openings in the cabinet and the back or bottom are provided for ventilation and to insure reliable operation of the television receiver and to protect it from overheating, these openings must NOT be blocked or covered. The openings should NEVER be blocked by placing the monitor on a bed, sofa, rug or other similar surface. This monitor should NEVER be placed near or over a radiator or heat register. This monitor should NOT be placed in built-in installation such as a bookcase unless proper ventilation is provided.



8. This monitor should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied in your home, consult your monitor dealer or local power company.
9. This monitor is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. DO NOT defeat the safety purpose of the grounding - type plug.
10. DO NOT allow anything to rest on the power cord. DO NOT locate this monitor where the cord will be abused by persons working on it.
11. Follow all warnings and instructions marked on the monitor.
12. For added protection for this monitor, when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the monitor due to power-line surges.
13. DO NOT overload wall outlets and extension cords as this can result into fire or electric shock.
14. NEVER push objects of any kind into this monitor through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. NEVER spill liquid of any kind on the monitor.
15. DO NOT attempt to service this monitor yourself since opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
16. Unplug this monitor from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power cord or plug is damaged or frayed.
 - b. If liquid has been spilled into the monitor.
 - c. If the monitor has been exposed to rain or water.
 - d. If the monitor does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the monitor to normal operation.
 - e. If the monitor has been dropped or the cabinet has been damaged.
 - f. When the monitor exhibits a distinct change in performance - this indicated a need for service.
17. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that has the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or other hazards.
18. Upon completion of any service or repairs to this monitor, ask the service technician to perform routine safety checks to determine that the monitor is in safe operating condition.

1. Installing the Monitor

Unpacking

Open the shipping cartons and check the contents.

If any items are missing or damaged, contact your dealer immediately.

The package should include the following items:

- TFT colour monitor
- 15-pin-mini-D-Sub/VGA signal cable
- DVI signal cable
- Audio cable
- AC power cord
- AC/DC power adapter
- User's manual

Installing the Monitor

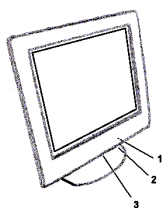
This monitor is equipped with an auto sensing DC power adapter for voltage ranges 100-240VAC, 60/50Hz. Confirm the line voltage designation on the rear panel of the monitor. Follow these steps to install the monitor:

1. Before you connect the cables, make sure that the monitor and the system unit power switches are off
2. Plug one end of the VGA and DVI cable to the monitor and the other end to the graphics card
3. Connect the DC power cord to the DC jack
4. Connect the power cable.

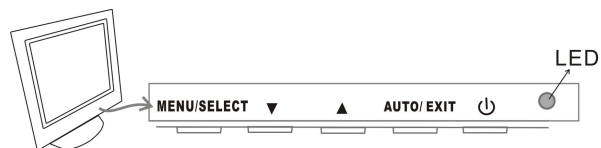
The 12", 15", 17" and 19" monitors of the VA series are equipped with a loud speaker on the rear side and an OSD-Board on the bottom of front bezel.

2. Control Functions

The monitor digital control functions are located on the front panel. They are shown in the figure below and described in the following paragraphs.



1. Indicator LED
2. Power Switch
3. Function Keys



Function Selection

With the ▲ and ▼ knobs, you can adjust the speaker's volume.

Press the MENU/SELECT knob to show the OSD menu. Then use the ▲ and ▼ knobs to select a function.

Press the AUTO/EXIT knob to close the OSD menu.

You can hold the AUTO/EXIT knob for more than 3 seconds to adjust the image quality automatically.

The OSD menu will close automatically after 3-10 seconds without operation and saves any changes you have made.

Function Adjustment

1. Signal Select



VGA

Select the image signal coming from the VGA cable



DVI

Select the image signal coming from the DVI cable



Exit

Close the Signal Select OSD menu

2. Video



Brightness

Adjust the luminance level in the image



Contrast

Adjust the difference in luminance between light and dark areas of the image



Exit

Close the Video OSD menu

3. Audio



Volume

Adjust the volume of speakers



Exit

Exit the Audio OSD menu

4. Colour / Colour Temperature



User

Adjust the R.G.B. gain level



6500K

Select colour temperature to 6500°K



9300K

Select colour temperature to 9300°K.



Exit

Close the Colour Temperature OSD menu

5. Image



Auto Tune Adjust geometry of the image automatically



Clock Adjust the horizontal sync size of signal



Phase Adjust the horizontal sync phase of signal



H. Position Adjust the horizontal position of the image



V. Position Adjust the vertical position of the image



Exit Close the Image OSD menu

6. Language



Sets the language of the OSD windows

7. Tools / OSD Control



OSD Timer Setting the OSD menu display time



OSD H. Position Adjust the horizontal position of the OSD menu



OSD V. Position Adjust the vertical position of the OSD menu



Exit Close the OSD Control OSD menu



Recall Recall the factory default setting



Sharpness Adjust the picture display more clearly



Exit Close the Tools OSD menu

8. Exit



Close the OSD menu

3. Controller Features

The controller automatically detects the graphics card installed in your system. When you turn on the monitor, the controller first checks the display mode memory stored in the user setting area of the graphics card, and then the factory presetting area. It then adjusts to the proper display mode.

4. Display Modes Memory

The controller has the memory capacity to store different display modes, including timing formats and display-settings.

Factory Presetting Area

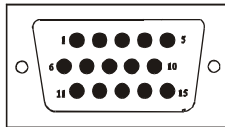
There are some preferred display modes preset in the controller. These display modes are preset at the factory and include the most popular display modes currently available. The controller searches for a proper display mode in this area if it fails to find a proper display mode in the user setting area.

	MODE	Resolution (Dots*lines)	Horizontal Freq.(KHz)	Vertical Freq.(Hz)	Is relevant for the sizes:	Remark
1.	VGA	640×350	31.5	70	12" – 19"	Non-interlaced
2.	VGA	720×400	31.5	70	12" – 19"	Non-interlaced
3.	VGA	640×480	31.5	60	12" – 19"	Non-interlaced
4.	VESA/75	640×480	37.5	75	12" – 19"	Non-interlaced
5.	VESA/60	800×600	37.9	60	12" – 19"	Non-interlaced
6.	VESA/75	800×600	46.9	75	12" – 19"	Non-interlaced
7.	VESA/60	1024×768	48.4	60	15" – 19"	Non-interlaced
8.	VESA/70	1024×768	56.5	70	15" – 19"	Non-interlaced
9.	VESA/75	1024×768	60.0	75	15" – 19"	Non-interlaced
10.	VESA/60	1280×1024	64.0	60	17" – 19"	Non-interlaced
11.	VESA/75	1280×1024	80.0	75	17" – 19"	Non-interlaced

5.Signal Connector Pin-outs

VGA

To connect VGA, 8514A or IBM-compatible graphics adapters, use a 15 pin mini D-type male connector.

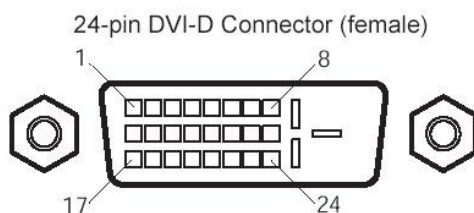


15-pin Mini D-type Male Connector

Pin Assignment

1	Red Video	6	Red Ground	11	Ground
2	Green Video	7	Green Ground	12	Serial Data/I/O
3	Blue Video	8	Blue Ground	13	H. Sync
4	Ground	9	No Connection	14	V. Sync
5	No Connection	10	Sync-Ground	15	Serial Clock Input

DVI



24-pin DVI-D type Female Connector

Pin Assignment

1	T.M.D.S. Data2	9	T.M.D.S. Data1	17	T.M.D.S. Data0
2	T.M.D.S. Data2	10	T.M.D.S. Data1	18	T.M.D.S. Data0
3	T.M.D.S. Data2/4	11	T.M.D.S. Data1/3	19	T.M.D.S. Data0/5
4	No Connection	12	No Connection	20	No Connection
5	No Connection	13	No Connection	21	No Connection
6	DDC Clock	14	+5V Power	22	T.M.D.S. Clock Shield
7	DDC Data	15	Ground	23	T.M.D.S. Clock
8	No Connection	16	Hot Plug Detect	24	T.M.D.S. Clock

6.Power Saving Feature

When the power saving active them the power indicator LED will be from Green Light to Amber and power saving feature complies with these VESA power saving modes:

Mode	H. Sync.	V. Sync.	LED	Power Consumption
Normal	On	On	Green	<40W
Stand-by	Off	On	Amber	< 3W
Suspend	On	Off	Amber	< 3W
Off	Off	Off	Amber	< 3W

The monitor uses the H. Sync and V. Sync signals to determine the operation mode to enter. The monitor power-saving feature automatically turns off H. Sync and V. Sync if there is no input from the system for a certain period of time. To use this feature, you need a green PC that is compliant with the VESA power saving feature or a software utility to detect system input such as keyboard or mouse.

7. Time Settings

Time settings are adjusted from the system unit by software. To fulfil the requirements in the NUTEK specification 803299/94 the total time from indicated inactivity to Power Saving position A2 (VESA OFF) must not be set more than 70 minutes. We recommend you switch off the monitor when you do not intend to use it for awhile.

8. Trouble Shooting

1) Power on but no picture

Make sure the VGA cable is tightly connected from the video output connector on the video card to the video input connector on the monitor.

Make sure you are using the standard power adapter coming with the monitor.

Check your video card if the driver is correctly installed. If there is no video signal from the video card, "NO INPUT SIGNAL" will show on the screen.

2) Wrong or abnormal colors

If any color (red, green, or blue) is missing, check video cable to make sure it is securely connected. Loose pins in the cable connector can cause a bad connection.

3) The text and icon look blurry

LCD monitor has a native resolution which pixels are produced by cells in fixed positions. When a resolution different from the native resolution is chosen, the LCD monitor uses various interpolation methods to achieve the pseudo resolution. To achieve the optimum viewing quality, choose the native resolution of the panel is recommended.

Use "Auto Tuning" function to adjust image quality on the OSD menu or you can hold button 2 for 3 seconds to do auto tuning.

4) Display position is incorrect

Use "Auto Tuning" function to adjust image position on the OSD menu or you can hold button 2 for 3 seconds to do auto tuning.

5) Speakers have no sound

Make sure the audio cable is tightly connected from the audio output jack on the PC to the audio input jack on the monitor.

6) Residue image

If an image remains on the screen for an extended period of time, it may be imprinted in the screen and leave a residue image. It is characteristic of liquid crystal and is not malfunction or deterioration of the liquid crystal. The residue image will disappear after a period of time. It is recommended to set up the screen saver for your LCD monitor.

7) Out of Rang

The first thing you need to check is the screen resolution. Usually "Out of Range" is caused by improper resolution setting. You can recover the proper screen resolution as the following steps for Windows: (Assumed that the optimal resolution and frequency setting is 1280x1024@ 60Hz.)

Boot the computer into **VGA Mode** (F8) [repeatedly] at startup.

Go to "**Control Panel**", double click on "**Display**", click on the **SETTINGS** TAB, and click on the **ADVANCED** button.

Then Click on the **Adapter** TAB, click "**List All Modes**" and change the screen resolution to 1280x1024. (You can select 16 bit or 32 bit color which depends on your video card capability.)

Select "**1280 by 1024, High Color (16 bit), Default Refresh**"

Click on the "**OK**" and "**APPLY**".

After clicking the **APPLY** button, a message will be displayed "Your desktop has been reconfigured. Do you want to keep these settings?"

Click "**Yes**" and "**OK**". Then click "OK" on the Display Properties window.

Restart your PC

After you restart, go back to "List All Modes" to adjust your screen refresh rate to 60 Hertz.

The "Out of Range" may happen if you switch monitor A to monitor B for your PC. Whenever you change the monitor for your PC, your PC may detect it as a new hardware and automatically install a proper driver for the monitor. So, you will have both monitor A and monitor B drivers on your PC. Sometimes the two monitor drivers may conflict each other and cause "Out of Range". You can resolve "Out of Range" by uninstalling both monitor drivers and reboot your PC. The Windows will automatically detect the new hardware and install a proper driver for the monitor. Here is a quick way to uninstall the monitor drivers:

Right click on "**My Computer**", select "**Properties**" and click on "**Hardware**". Click on "**Device Manager**", select "**Monitor**" and click on "+" in front of "Monitor". Then you can see one of the monitor drivers called "**Plug and Play Monitor**". A quick way is to uninstall all the monitor drivers and then let Windows automatically detect the new hardware. (Right click on the monitor driver and select "Uninstall").

Restart your PC

C. caveat emptor / Guarantee exclusion

Claims for defects do not exist in the following cases:

- natural wear and tear, and any damage, errors, reduced output or changes in the condition or function of our products that are due to external factors (e.g. blows, knocks, vibrations, water, fire), or due to improper storage, handling, assembly or any other improper use, or due to extreme climatic conditions, or to particular reception or operating conditions at the location where the item is used;
- defects due to constructional errors or material defects, insofar as the customer has prescribed the construction or the material;
- burn-in on the LCD panel caused by permanent display and spots forming on the LCD panel

D. Vendor

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